Senecio aetfatensis (Asteraceae: Senecioneae), a New Species from Zimbabwe

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ABSTRACT. A new species, Senecio aetfatensis, is described from the Chimanimani Mountains of eastern Zimbabwe.

During the AETFAT post-congress excursion in the mountains of eastern Zimbabwe in February 1997, I was fortunate to find and collect an undescribed species of *Senecio*. It is a pleasure to name the new species for the Association pour l'Étude Taxonomique de la Flore d'Afrique Tropicale (AETFAT), which held its XVth Congress in Harare on 3–7 February 1997.

Senecio aetfatensis B. Nordenstam, sp. nov. TYPE: Zimbabwe. Chimanimani National Park, along footpath from entrance office to Mountain Hut, ca. 1600 m, 11 Feb. 1997, Nordenstam 9292 (holotype, S; isotypes, K, MO, SRGH). Figure 1.

Herba perennis ramosissima 0.6–1.5 m alta et lata. Caules et rami brevi-villosi. Folia alterna sessilia herbacea 3-6(-8) cm longa 1.5-3.5 cm lata plana pinnatisecta sparse hirsutula, basin versus angustata, basi semiamplexicaulia auriculata; lobis utrinque 3-5 oblongis pinnatilobatis vel dentatis acutis. Capitula 3–10 corymbosa radiata pedunculis gracilibus 1-5 cm longis. Involucrum campanulatum; involucri bracteae 13-21 subuniseriatae lineari-lanceolatae 4-5.5 mm longae 0.5-1.5 mm latae virides glabrae nervis 1-2 resiniferis marginibus anguste membranaceis apicibus acutis-acuminatis puberulis. Calyculi bracteae 5–8 anguste triangulares acutae. Receptaculum planum nudum alveolatum. Flosculi radii plerumque 8 flavi. Flosculi disci numerosi, corolla flava tubulosa superne dilatata quinquelobata. Antherae basi breviter sagittatae, collum filamenti basi dilatatum. Styli rami lineares, areis stigmaticibus separatis, apicibus truncatis pilis eferrentibus brevibus. Cypsela anguste elliptico-oblonga costata breviter villosa. Pappi setae numerosae graciles minute barbellatae caducae.

Much-branched herb forming a bushy rounded clump 0.6–1.5 m high and wide. Stems and branches somewhat brittle, shortly villous. Leaves alternate, sessile, herbaceous, soft, doubly pinnatisect, 3–6(–8) cm long, 1.5–3.5 cm wide, flat, shortly hirsute, green above, paler below, with 4–5 lobes on each side, narrowed toward the base and petiolariform; leaf lobes 3–5 on each side, oblong, pin-

nately lobed or dentate, acute; leaf base half-clasping and auriculate with dissected or dentate small ears. Capitula 3–10 in a terminal, laxly branched corymbiform synflorescence; peduncles 1-5 cm long, slender. Involucre campanulate; involucral bracts 13-21, subuniseriate, linear-lanceolate, 4-5.5 mm long, 0.5–1.5 mm wide, green with narrow membranous margins, 1-2-veined with resiniferous veins, acute to acuminate, tips puberulous, otherwise glabrous. Calycular bracts 5-8, 1-2 mm long, narrowly triangular, flat, acute. Receptacle flat, naked, alveolate. Ray florets (5-)8; corolla yellow; tube 2-3 mm long, somewhat glandular-puberulous; lamina elliptic-oblong, 4.5–8 mm long, 2.5– 3.5 mm wide, 4-veined, patent or rolled back. Disc florets ca. 40-60; corolla yellow, tubular, widening above to a narrowly campanulate limb 2-3 mm long, 5-lobed, 3.5-4.5 mm long; lobes deltoid or triangular-ovate, 0.5–0.7 mm long, minutely papillate outside toward the apex, with a central resiniferous vein. Anthers 1.3-1.7 mm long including appendage; apical appendage oblong-ovate, obtuse; anther base shortly sagittate; filament collar basally swollen ("balusterform"). Style branches linear, 0.7-1 mm long with stigmatic areas separated, apex truncate with short sweeping-hairs. Cypsela narrowly elliptic-oblong, terete, 2-2.5 mm long, ca. 0.6 mm wide, with ca. 8 light brown ribs, white-villous on and between ribs, hairs mucilaginous when soaked. Pappus bristles numerous, erect, 3-4 mm long, slender, minutely barbellate, white, caducous.

The single individual seen by me was growing from a crevice on a vertical rock face with a western aspect, and the specimens collected by Wild were stated to grow among crags. The new species belongs to Senecio sect. Senecio, but it is difficult to point out any very close relatives. There are a number of Senecio species with pinnatisect leaves in southern Africa, but they are all clearly distinct. Some are annuals with either purple florets (e.g., S. cakilefolius DC., S. eenii (S. Moore) Merxmüller) or yellow florets, but then with smaller capitula (e.g., S. cryphiactis O. Hoffmann, S. piptocoma O. Hoffmann). Some forms of S. consanguineus DC. are

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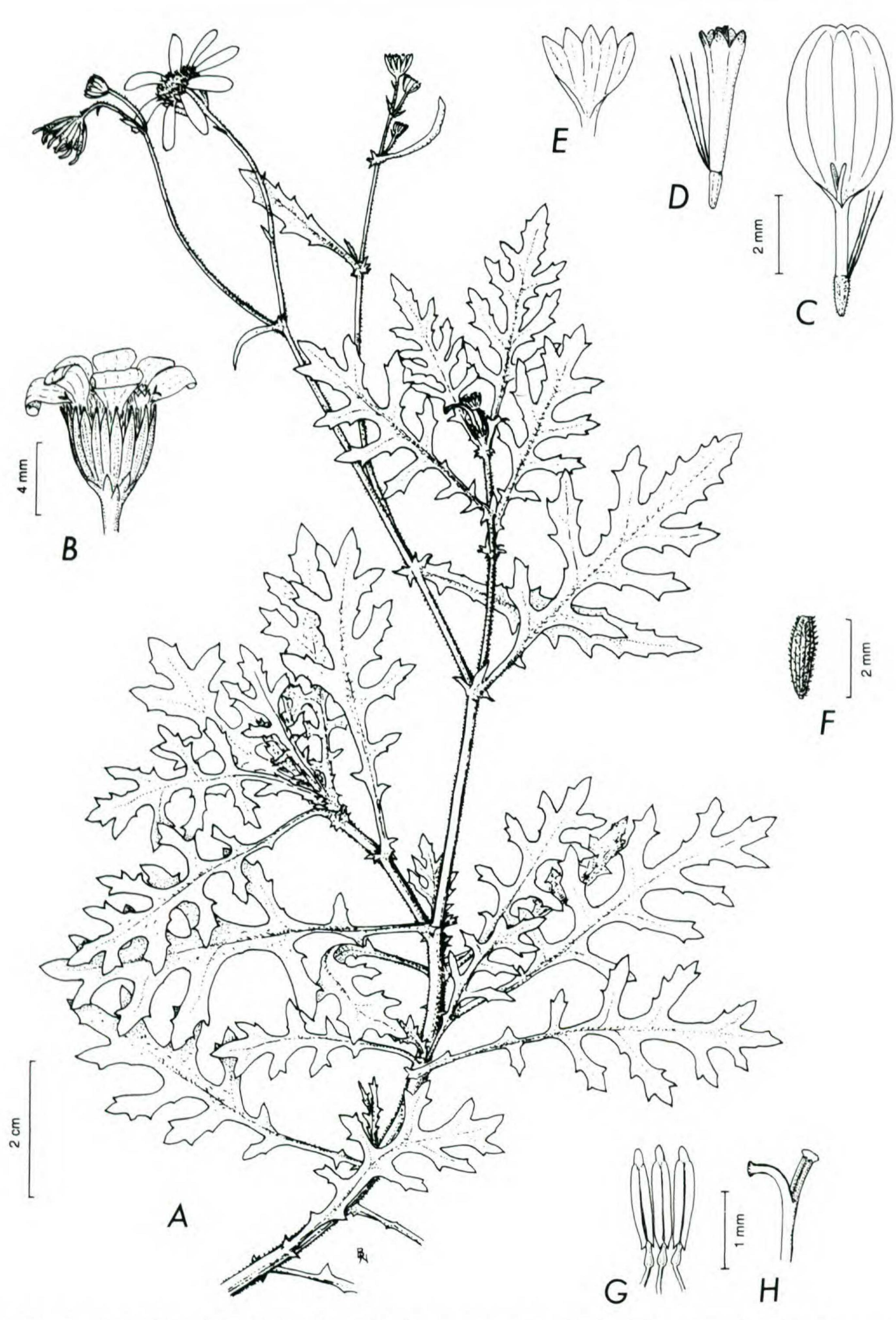


Figure 1. Senecio aetfatensis B. Nordenstam. —A. Flowering branch. —B. Capitulum. —C. Ray floret (most pappus bristles removed). —D. Disc floret (most pappus bristles removed). —E. Corolla of disc floret, opened longitudinally. —F. Cypsela, pappus removed. —G. Stamens. —H. Style branches from disc floret. Drawn by the author (based on Nordenstam 9292, S).

also superficially similar to the new species, but clearly distinct by the erect annual habit, longer involucral bracts, and short rays. Among perennial species with some resemblance, *S. cinerascens* Aiton has leaves white-woolly below and larger flower heads, *S. poseidonis* Hilliard & Burtt has purple or white florets, and *S. rhyncholaenus* DC. has viscid stems and leaves and discoid, white-flowered, narrow capitula. The closest relative may be *S. subrubrifolius* O. Hoffmann, a species known from the Orange Free State, Transvaal, Natal, and Lesotho, similar in habit and leaf shape, but different by the turbinate, discoid flower heads, and the glandular pubescence making the plant viscid.

The bushy habit, the pinnatisect flat leaves, and the yellow, distinctly radiate capitula of *S. aetfatensis* are reminiscent of the genus *Cineraria*, which explains the labeling of the paratype as "*Cineraria* sp." However, this is a superficial resemblance, the new species lacking the generic characters of *Cineraria* such as the flattened cypsela.

Paratypes. ZIMBABWE. Chimanimani Mts., Mt. Peza, 6500 ft., 15 Oct. 1950, H. Wild 3621 (BR, S, SRGH). [A pencilled note on the SRGH sheet suggests that Gilliland 1890 may be the same species. The latter collection was searched for but not found in several possible herbaria (e.g., J, K, LD, PRE, SRGH).]